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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,335	02/25/2004	Jorge L. Lombana	240022	8789

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Sanchelima and Associates, P.A.
Jesus Sanchelima, Esq.
235 S.W. Le Jeune Rd.
Miami, FL 33134

EXAMINER

LAWRENCE JR, FRANK M

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,335

Applicant(s)

LOMBANA, JORGE L.

Examiner

Duane Smith

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

1. Status of parent case on page 1 of the specification should be updated.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Watts(US Patent No. 4,278,550).

Watts teaches a centrifugal separator device(Figs. 1 and 4) including a wound conduit member(3) having an inlet(2) and an outlet(10) defining an outermost wall(5) having a plurality of through openings(4)(see Figs.3-4,cols.2-3) and means for generating a pressure differential(inherent) between the inlet and the outlet of the conduit to flow a mixture comprising at least two fluids having differing densities through the conduit whereby the denser fluid is forced out through the openings(4) by the centrifugal forces and separated from the lighter fluid(col. 2 lines 30-45, col. 3 lines 20-45). Watt further teaches housing means(13) for collecting the denser fluid and openings(4) disposed at an angle(see Figs.).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts(US Patent No. 4,278,550) taken together with Lavigne(US Patent No. 2,015,076).

Watts discloses the device essentially as claimed, supra, except for the conduit having a plurality of outwardly extending wall portions for each of the through openings adjacent and upstream therefrom to prevent reentrainment and facilitate exiting of the denser fluid. However, Lavigne does disclose such a feature(unlabeled but best seen in Fig. 6 and element 9 in Figs. 2-3). It would have been obvious to one of ordinary skill in the art at the time of the invention to include such extending walls as in Lavigne in the device of Watts in order to divert and accumulate separated denser fluid as suggested by Lavigne(col. 3 lines 33-40). With respect to claims 3-4 and 7-8, routine optimization of angles to obtain the greatest separation efficiency is well within the scope of one of ordinary skill in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to angle the openings of Watts to 15-45 degrees with respect to the internal surface in order to obtain the maximum separation efficiency of the denser fluid from the lighter fluid and there has been no showing of unexpected or unobvious results of utilizing one angle over another angle.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other prior art references listed on PTO-892(Notice of References Cited) are considered to be of interest, disclosing similar centrifugal separators.

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7. .Any inquiry concerning this communication should be directed to Duane Smith at telephone number 571-272-1166.

Dss

9-2-04

DUANE SMITH
PRIMARY EXAMINER

DSS
9-2-04